

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------|----------------------|-------------------------|------------------|
| 09/441,102 | 11/16/1999 | DAVID A. SCHWARTZ | 062891.0285 | 3856 |
| 7 | 590 10/15/2002 | | | |
| BAKER & BOTTS LLP 2001 ROSS AVENUE DALLAS, TX 752012980 | | | EXAMINER | |
| | | | EMDADI, KAMRAN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2664 | - - |
| | | | DATE MAILED: 10/15/2002 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

4

| | Application No. | Applicant(s) | | | | |
|--|--|---|--|--|--|--|
| | 09/441,102 | SCHWARTZ ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Kamran Emdadi | 2664 | | | | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet w | ith the correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). Status | 136(a). In no event, however, may a ly within the statutory minimum of thi will apply and will expire SIX (6) MOI a, cause the application to become A | reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). | | | | |
| 1) Responsive to communication(s) filed on 16 | November 1999 . | | | | | |
| 2a) This action is FINAL . 2b) ⊠ Th | nis action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | Ex parte Quayle, 1935 C. | .D. 11, 403 O.G. 213. | | | | |
| 4)⊠ Claim(s) <u>1-59</u> is/are pending in the application | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-59</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/o | or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | | the Eveniner | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bu * See the attached detailed Office action for a list | ureau (PCT Rule 17.2(a)). t of the certified copies no | t received. | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) § | 5) Notice of | Summary (PTO-413) Paper No(s) f Informal Patent Application (PTO-152) | | | | |

Page 2

Application/Control Number: 09/441,102

Art Unit: 2664

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 2. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).
- 3. Claims 1-3, 5, 12-14, 16, 23-26, 33-36, 43-46 and 53-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Wynn (US Patent No. 6275499).
 - Regarding claims 1, 12, 23, 33, 43, and 53, Wynn teaches: a plurality of cards in a backplane (Col 5, lines 30-40), where the cards each have unique network addresses, and communicate packets to the cards (Col 9, lines 5-10), and where the frames are shown to contain address information (Figures 8 and 9), where more than one packet is transmitted between network devices on the backplane (Figure 22) and the association of ports on the backplane cards (Figure 19).
 - Regarding claims 2, 13, 25, 35, 45, and 55, Wynn teaches: The use of Ethernet (Figure 19) and a MAC address is an inherent attribute of Ethernet.

Page 3

Application/Control Number: 09/441,102

Art Unit: 2664

- Regarding claims 3, and 14, the use of destination addresses in determining the various packets and their respective destinations, where these data formats are described along with the switching matrix 11a used in the backplane (Col 8, lines 55-59).
- Regarding claims 5, 16, 26, 36, 46, and 56, Wynn teaches: a plurality of buses on the backplane system (Col 1, lines 48-54), and an OC-3 type network interface capability (Col 2, lines 3-5) where OC-3 is a well known dedicated bandwidth at 155.52 Mbps (Col 1, lines 22-23).
- Regarding claims 24, 34, 44, and 54, it is an inherent feature of a network card to have a standardized network address associated with its identity, as a MAC address is a standardized network address identifier for any Ethernet network card, a commonly known and abundant type of network card.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 4, 15, 27, and 57, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn (US Patent No. 6275499), in view of Bare (US Patent No. 6216167).
 Wynn teaches: a backplane used for networking with all of the above embodiments except a network switch being coupled to the backplane switch. Bare teaches:

Art Unit: 2664

network switches communicating throughout a network (Figure 13) and in conjunction with a backplane device (Col 33, lines 25-30). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the use of a backplane with network switch for providing more network connectivity to devices that have various physical attributes.

- Claims 6, 7, 8, 10, 17, 18, 19, 21, 28, 29, 31, 37, 38, 39, 41, 47, 48, 49, 51, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn (US Patent No. 6275499), in view of Bare (US Patent No. 6216167) and further in view of Peirce (US Patent No. 6157649).
- Regarding claims: 6, 7, 10, 17, 18, 21, 28, 31, 37, 38, 41, 47, 48, and 51 Wynn teaches: a backplane used for networking with all of the above embodiments except a gateway card coupled to a telephone network in conjunction with an IP address.

 Peirce teaches: a backplane network device (Col 5, lines 9-10) with a gateway card that answers calls (Col 2, lines 30-31), where the network is a telephone network (Col 1, lines 18-19), where the data transfer between units includes the IP protocol address association (Figure 4), with a plurality of packets being sent (Figure 3). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the use of IP addresses and telephone network connectivity as part of a large integration effort for networking improvement projects.
- Regarding Claims 8, 19, 29, 39, 49, and 58, Wynn teaches: a backplane used for networking where there exists a priority scheme for prioritizing data by bits (Col 18, lines 44-50), but fails to teach of a gateway card coupled to a telephone network

Art Unit: 2664

transferring voice data in connection with the backplane device. Peirce teaches: a backplane network device (Col 5, lines 9-10) with a gateway card that answers calls (Col 2, lines 30-31), where the network is a telephone network (Col 1, lines 18-19) and telephone networks carry voice. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the use of a gateway card to transfer network information that includes the data associated with voice, in the form of prioritized data packets, for prioritizing time sensitive data like voice for efficient human perception requirements.

- 7. Claims 9, 20, 30, 40, 50, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn (US Patent No. 6275499), in view of Lemaire (US Patent No. 6205149), Wynn teaches: a network backplane device where network data is transferred to and from cards on the backplane, but fails to teach of a priority indicator in the form of bits used to indicate a QoS level of association for an IEEE 802.1q standard used in conjunction with the current invention. Lemaire teaches: a priority bit used in a networking environment for a QoS indicator (Col 1, lines 35-39), where the system is capable of processing an 802.1q type packet for selection (Col 6, table/lines 23-24), where the QoS is implemented within the packet data transfer algorithm (Col 6, lines 28-31). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the use of a QoS standard with 802.1q standard into a backplane network design for a broader acceptance of standardization.
- 8. Claims 11, 22, 32, 42, 52 and 59, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn (US Patent No. 6275499), in view of Francis (US Patent No.

Art Unit: 2664

6426952), Wynn teaches: a network backplane device, but fails to teach of a hot-swappable configuration for the backplane or a configuration where a card from the backplane could be removed while the system is powered on or operating. Francis teaches: a backplane with a method for hot-swapping cards while the system is operating (Col 27, lines 34-36). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the feature of removing cards from a backplane device while operation is active for a fast and easy method of maintenance or repair.

Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - Momirov (US Patent No. 6216167) Network based forwarding of data.
 - Hiscock (US Patent No. 6181681) LAN media access control.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamran Emdadi whose telephone number is (703) 305-4899. The examiner can normally be reached between the hours of 8am and 5pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached at (703) 305-4366. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9314 for regular communications. Any inquiry of a general nature or relating to

Art Unit: 2664

the status of this application or proceeding should be directed to the receptionist

whose telephone number is (703) 305-3900.

PRIMARY EXAMINER

10/09/2002

Kamran Emdadi

KWANG BIN YAO PRIMARY EXAMINER

Page 7